

## DEPARTMENT OF THE ARMY

VICKSBURG DISTRICT, CORPS OF ENGINEERS 4155 CLAY STREET VICKSBURG, MISSISSIPPI 391833435

December 9, 2010

Engineering and Construction Division

Mr. Richard T. Miller 3671 Woodward Place Jackson, Mississippi 39216

Dear Mr. Miller:

I refer to your recent letter to Mr. Robert Fitzgerald, former Chief, Engineering and Construction Division, U.S. Army Corps of Engineers, Vicksburg District, expressing concerns related to the February 2007 Pearl River Watershed preliminary draft feasibility report and to the Levee Evaluation report of February 23, 2010, for the east and west bank Pearl River levees in Hinds and Rankin Counties, Mississippi.

Pearl River Watershed studies were terminated on November 23, 2009. The February 2007 Pearl River Watershed preliminary draft feasibility report, Volumes I-IV, is posted on the Vicksburg District's website at <a href="https://www.mvk.usace.army.mil">www.mvk.usace.army.mil</a>. We have carefully reviewed your comments and concerns related to this study, and we will certainly take them into consideration should further studies be conducted.

The Levee Evaluation report for the east and west bank Pearl River levees recommended these levees be accredited as reasonably protecting against the 1 percent chance flood event on the Pearl River. This recommendation was made only after a thorough engineering analysis. The Levee Evaluation report documenting findings is also posted on the Vicksburg District website.

Specific information you seek that is not included in the above-referenced reports should be requested under the Freedom of Information Act (FOIA). The FOIA requests should be directed to our Office of Counsel at the above address, Attn: CEMVK-OC.

Further questions related to the Pearl River study or existing levees report should be directed to Mr. Gary Walker, Senior Project Manager (telephone (601) 631-5469).

Sincerely,

Gary L. Young

Chief, Vicksburg Planning Branch

Robert H. Fitzgerald P.E.

United States Army Corps of Engineers Vicksburg District

4155 East Clay Street

Vicksburg, MS 39183

Dear Mr. Fitzgerald,

I am writing to follow up our meeting on 28 Sept 2009 in the Corps office in Vicksburg. At that time we discussed the need to recognize the impact the reservoir has on flow rates in the Pearl River downstream of the dam. I communicated my dismay about this omission and the impact this difference would make in flood control studies. Along those lines we discussed the impact the change would have on the function of the NED levee plan as specified in the 2007 Draft Feasibility report. I raised the point of backwater flooding and you promised to forward interior studies done quantifying the risk to the interior areas in Jackson.

Since that time your signature has certified the levees in Jackson using a flow-frequency curve derived using what I consider to be dubious methods. It appears, as in previous studies by the Vicksburg District of the Corps, the flow-frequency curve for the Jackson Hwy 80 gage was derived ignoring the presence of the reservoir, this omission has caused a non-homogeneous and non-random data set to be used. The error in your method can be plainly seen by comparing same event frequencies above and below the reservoir. As an example, the 1979 flood, well documented by USGS and the Mobile district of the Corps to be a 500 year event, is listed as a 200 year event in the NED

Levee Plan 2007 Draft Feasibility Study, and is now over a 2000 year event in your levee certification document.

To make an accurate frequency-flow curve for the Hwy 80 gage, the Reservoir operational model should be applied to historical inflows of the reservoir (that is our closest, most homogeneous and most random data set). The output from the discharge model should be modeled downstream to the Hwy 80 gage location effectively correcting the historical flow rates to current Reservoir operational conditions.

I am still interested in receiving the interior studies done for the NED Levee Plan in the 2007 Draft Feasibility Report and this will serve as a public information request if that is needed. In addition, I believe the flow-frequency curve for the highway 80 gage in Jackson needs to be corrected for the levee certification and flood control studies. I would like your help in getting that done. Please contact me at anytime.

Sincerely, Richard T. Miller

Richard T. Miller

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